ABSTRACT

Prediction of perinatal outcome in gestational diabetic/diabetic mother

AIMS&OBJECTIVES:

1. To find correlation between perinatal outcome and anthropometry measurement of baby born to gestational diabetic/diabetic mother.
2. Prediction of perinatal morbidity and mortality in gestational diabetic/diabetic mother

Methodology: This prospective observational was conducted in the NICU Department of Pediatrics, Mahatma Gandhi Memorial Government hospital & K.A.P. Viswanatham Government Medical college,Trichy from July 2015 to August 2016. 150 consecutive cases of infants of diabetic mothers were enrolled in the study. Maternal history especially obstetric history and history regarding diabetes mellitus were obtained and complete neonatal examination was performed. The physical findings and anthropometric measurements were recorded into a printed proforma. Serum glucose, serum calcium,hematocrit ,serum bilirubin and echocardiography was performed in all enrolled babies.

Results: Out of 150 diabetic mothers, gestation diabetes was seen in 81.3% while pre-conceptional diabetes was seen in 18.7%. The male Infants of Diabetic Mothers in this study were 45.3%. Infant of Diabetic Mothers delivered by C- section were 58.7%.Neonatal hyperbilirubinemia 27% (n=40) was found to be the most common complication followed by Large for gestational age 24%(n=36). The mortality rate in our study was 7.3% (n=11).The incidence of ASH is 41.3%.There was a significant correlation between Asymmetrical septal hypertrophy and difference between head circumference and chest circumference (ROC Curve)with a specificity of 78.41%. The relative risk calculated was 1.62 between head circumference and chest circumference difference and morbidity. The incidence of complications such as ypoglycemia, hypocalcemia, hyperbilirubinemia, respiratory distress and mortality is 1.62 times more common when chest circumference is more than head circumference.

Conclusion: This study confirms that anthropometric measurements of IDM can be used to predict ASH ,Morbidity and mortality pattern.

Key Words: Macrosomia, Diabetes, ASH, Head circumference, Chest circumference.